



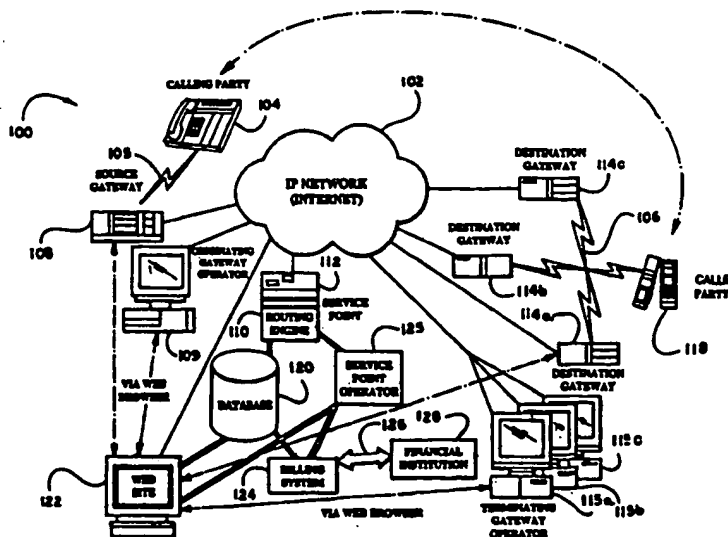
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(21) International Application Number: PCT/US98/19254 (22) International Filing Date: 16 September 1998 (16.09.98) (30) Priority Data: 60/059,087 16 September 1997 (16.09.97) US (71) Applicant: TRANSNEXUS, LLC [US/US]; Suite N-204, 430 Tenth Street, N.W., Atlanta, GA 30318 (US). (72) Inventors: DALTON, James, Pleasant, Gossett, Jr.; 3300 Wood Valley Drive Road, Atlanta, GA 30327 (US). DALTON, Aicina, de Figueiredo; 3300 Wood Valley Road, Atlanta, GA 30327 (US). THOMAS, Stephen, Anthony; 4397 Windsor Oaks Circle, Marietta, GA 30066 (US). COWN, Maria, Osterholt; 2854 Betula Drive, Austell, GA 30106 (US). VAUGHN, Rich, Carroll; 4383 Burnleigh Chase, Roswell, GA 30075 (US). SZCZERBINA, Pawel; 795 Hammond Drive #1604, Atlanta, GA 30328 (US). LOVETTE, Brian, Keith; 2540 Ingram Road, Duluth, GA 30136 (US). (74) Agents: PAVENTO, Michael, S. et al.; Jones & Askew, LLP, 37th floor, 191 Peachtree Street, N.E., Atlanta, GA 30303 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. (88) Date of publication of the international search report: 14 May 1999 (14.05.99)	

(54) Title: INTERNET TELEPHONY CALL ROUTING ENGINE

(57) Abstract

The present invention discloses a centralized routing engine that is able to assist gateways in making routing decisions for calls being placed in an IP network environment. Types of calls include voice, fax, video, etc. The routing engine provides significant flexibility to the gateways by allowing the gateways to designate preferences that define operational limits or requirements. A source gateway operator may set preferences such as the maximum price that is willing to be paid for a call, the maximum delay that will be tolerated and the maximum autonomous system hop count that will be tolerated. A destination gateway operator is likely only to be concerned with setting price schedules as preferences. Gateway operators may also set "preference criteria", which define the circumstances in which a certain set of preferences is to be applied. Based on preferences and preference criteria, the routing engine is able to locate destination gateways that are eligible to terminate a voice over telephony IP call. The routing engine provides a prioritized list of eligible destination gateways to the source gateway. The source gateway then works through the prioritized list and attempts to set up the voice over IP telephony call with each eligible destination gateway, until the call is established.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/19254

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04M7/00 H04L29/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H04M H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 98 36543 A (TELIA AB PUBL ;ALMGREN GUNNAR (SE)) 20 August 1998 see the whole document ---	1-3, 23-25, 33
A	THOM G A: "H. 323: THE MULTIMEDIA COMMUNICATIONS STANDARD FOR LOCAL AREA NETWORKS" IEEE COMMUNICATIONS MAGAZINE, vol. 34, no. 12, December 1996, pages 52-56, XP000636454 see the whole document ---	1-49
A	RUDKIN S ET AL: "REAL-TIME APPLICATIONS ON THE INTERNET" BT TECHNOLOGY JOURNAL, vol. 15, no. 2, April 1997, pages 209-225, XP000703571 see the whole document ---	1-49
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Patent family members are listed in annex.

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Date of the actual completion of the international search

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Megalou, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/19254

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 434 848 A (GUN LEVENT ET AL)</p> <p>18 July 1995</p> <p>see abstract</p> <p>see figure 1</p> <p>see column 3, line 20 - column 4, line 18</p> <p>-----</p>	1-49

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/19254

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9836543 A	20-08-1998	SE 9700516 A	15-08-1998
US 5434848 A	18-07-1995	NONE	